

REMARKS

Claims 1, 3, 6, 9-11, 13, 15, 18, and 21-33, as amended, are pending in this application. Claim 12 has been canceled.

As no new matter has been added by the amendments herein, Applicants respectfully request entry of these amendments at this time.

THE REJECTIONS UNDER 35 U.S.C. § 112

Claims 1, 3, 6, 9-12, 13, 15, 18, 21-33 were rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement for the reasons set forth on pages 3-4 of the Office Action. In addition, the Examiner rejected claims 1, 3, 6, 9-12, 13, 15, 18, and 21-33 under § 112, second paragraph, as indefinite as explained on page 4 of the Office Action. Finally, the Examiner rejected claim 12 under 35 U.S.C. § 112, second paragraph, as indefinite for the reason set forth on page 4 of the Office Action.

As a threshold matter, claims 1 and 13 were rewritten in April 2008 in an attempt to clarify the composition that formed the outer cylindrical component and address the Examiner's concerns of vagueness with regard to the term "mainly". See, e.g., January 9, 2008 Office Action at Page 4, April 8, 2008 Response to Office Action, and April 14, 2008 Supplemental Response to Office Action. In particular, the claim language originally filed, i.e., "mainly containing zirconium" was rewritten to remove the term "mainly" and, instead, employ transition language more often used in the United States in an attempt to render the metes and bounds of the claim determinable.

This amended claim language was decided upon based on the teaching in the Written Description that the outer component "mainly contains zirconium" and further teaching that the outer component may be formed from Zircaloy 2 or Zircaloy 4 or other suitable alloys based on Zr. See, e.g., Page 15, lines 14-15 and original claims 6 and 18. As one example of a zirconium alloy that may be used, the inventors discussed Zr-based alloys that contain Nb. Page 7, lines 9-15. From this teaching, a skilled artisan would readily understand that the phrase "mainly containing zirconium" generally relates to zirconium-based alloys. In fact, the Written Description states that "[t]hese materials are common in connection with cladding tubes and have been shown to have many good properties." *Id.* Thus, the claim language "comprising a zirconium-based alloy" is adequately described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention as required by 35 U.S.C. § 112, first paragraph.

Furthermore, as set forth in MPEP § 2163.02, the subject matter of the claim need not be described literally (*i.e.*, using the same terms or in *haec verba*) in order for the disclosure to satisfy the description requirement. MPEP § 2163.02. It is only when a claim is amended to include subject matter, limitations, or terminology not present in the application as filed, involving a departure from, addition to, or deletion from the disclosure of the application as filed, that the examiner should conclude that the claimed subject matter is not described in that application. *Id.* This is simply not the case here.

In fact, an objective standard for determining compliance with the written description requirement is, “does the description clearly allow persons of ordinary skill in the art to recognize that he or she invented what is claimed.” *In re Gosteli*, 872 F.2d 1008, 1012 (Fed. Cir. 1989). Under *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991), to satisfy the written description requirement, an applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention, and that the invention, in that context, is whatever is now claimed. The phrase “mainly containing zirconium” and the additional discussion regarding specific zirconium alloys that may be used for the outer component conveys with reasonably clarity to a skilled artisan that the inventors were in possession of the subject matter that appears in the claims.

Moreover, the same type of language was originally used in connection with the inner component. For example, both the claims and the Written Description featured an inner component “mainly containing zirconium” and further defined this phrase as an alloy containing certain amounts of Sn, Fe, O, and Zr. *See, e.g.*, Page 7, lines 16-29. Accordingly, the phrase “mainly contains zirconium” with respect to the inner component was updated to use the transition language “comprising” when defining the alloy therein. *See* October 1, 2007 Response at Page 2. It is unclear as to why the Examiner considers the update to the claims with respect to the outer component new matter but finds the similar amendment with respect to the inner component acceptable.

Applicants respectfully submit that, for similar reasons, the phrase “comprising a zirconium-based alloy” does not render the claims indefinite under § 112, second paragraph.

Finally, with regard to the rejection of claim 12, Applicants respectfully submit that the cancellation of this claim renders the rejection moot.

Based on the amendments and remarks herein, reconsideration and withdrawal of the § 112 rejections is respectfully requested.

CONCLUSION

All claims are believed to be in condition for allowance. If the Examiner believes that the present amendments still do not resolve all of the issues regarding patentability of the pending claims, Applicants invite the Examiner to contact the undersigned attorneys to discuss any remaining issues.

A Petition for Extension of Time is submitted herewith to extend the time for response one month to and including July 17, 2009. No other fees are believed to be due at this time. Should any fee be required, however, please charge such fee to Hanify & King, P.C., Deposit Account No. 50-4545, Order No. 5233-052.

Respectfully submitted,

HANIFY & KING,
PROFESSIONAL CORPORATION

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By: Stephanie D. Scruggs
Stephanie D. Scruggs, Registration No. 54,432
Hanify & King,
Professional Corporation
1875 K Street N.W., Suite 707
Washington, D.C. 20006
(202) 403-2105 Telephone
(202) 429-4380 Facsimile